The High Density Switch saves rack space.
- The 4x8 switches are 1RU in height.
- The 4x16 and 4x32 switches are 2RU in height.
Features NTI’s patented true autoboot USB switching – all attached computers can be booted simultaneously.
Compatible with USB computers (PC, SUN, MAC).
Cascade UNIMUX switches off a single master switch to control up to 256 computers as if from one switch.
High quality steel construction.
Crisp and clear 1920x1200 video resolution.
Equipped with OSD, Liquid Crystal Display, RS232, and Ethernet.
Dedicated microprocessors prevent computers from locking up, ensuring reliable control.
Cabling runs are simplified with NTI’s high density KVM switch cables.
Flash upgradeable
Optional support for USB 2.0 (low/full speed) devices, in addition to keyboards and mice, such as a 3M or Elo USB touch screen monitors, SMART Board™ Interactive Whiteboards, or CAC card readers.
- Additional USB device must be the same for each user.

Up to four users can control 32 USB computers
- USB connector for 3M or Elo USB touch screen monitor, CAC reader, or SMARTBoard™ Interactive Whiteboard
- USB only switches – no VGA video

UNIMUX-4X8-UHD (Front and Back)
The UNIMUX™ High Density VGA USB KVM Matrix Switch allows up to four users to individually command or simultaneously share up to 32 USB computers. Access USB computers (PC, SUN, and MAC) using USB keyboards and mice, and VGA multiscan monitors.

Specifications

Hosts
- Female 15-pin HD connectors.
- Supports USB computers with VGA video.
- Any legacy PS/2 or SUN computer can be connected by using a USB-PS2-R or USB-SUN-R adapter.

Devices
- Female USB Type A connectors.
- Keyboard and mouse are hot-pluggable.
- Available with optional female USB Type A connectors for additional USB 2.0 (low/full speed) devices - USB touch screen monitors, CAC card readers, interactive whiteboards, or barcode scanners.
  - USB maximum data rate: 12 Mbps.
  - Supported interactive whiteboards: SMART Board™ SB640
  - Supported card readers: Athena, Cherry, Gemalto, Generic USB, Dell smart card/keyboard combo, and SCM Microsystems.

Monitor
- Crisp and clear 1920x1200 resolution.
- Female 15-pin HD connectors.
- A multiscan VGA monitor is required to display the different video outputs from different platforms.
- Bandwidth is 150 MHz.

Regulatory Approvals
- CE, RoHS
- TAA compliant

Power
- 110 or 220 VAC at 50 or 60 Hz via IEC connector.

Power Consumption

<table>
<thead>
<tr>
<th>Model</th>
<th>Watts</th>
<th>Model</th>
<th>Watts</th>
</tr>
</thead>
<tbody>
<tr>
<td>4x8</td>
<td>20</td>
<td>4x16</td>
<td>25</td>
</tr>
<tr>
<td>4x32</td>
<td>40</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Cables
- Interface cables between your computers and the switch are required for proper operation. (Cables not included)
  - Use HDUSBVEXT-xx-MM to connect computers to the switch.
  - Use USB male A to female A cables with HDUSBVEXT-xx-MM to extend USB beyond 15 feet.
  - Use HDUSB-6-MM to connect computers to the UNIMUX-nXm-UHD-NV USB-only switches (NO VGA VIDEO).
**High Density VGA USB KVM Matrix Switch**

**UNIMUX™**

**Up to four users can control 32 USB computers**

**Configuration and Cable Illustration**

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**Control Methods**

### Keyboard
- Scan, Broadcast, Sharing or Command modes are available from the keyboard using hot keys.

### RS232 Control
- Female RJ45 connector.
- Baud rate 1200 to 115200.
- Address up to 15 units, all of which can be daisy-chained and controlled by one serial port.

#### Commands
- CS – causes one INx/OUTx connection to occur.
- CA – causes all inputs to connect to specified output.
- RO – reads what input is connected to specified output.
- RU – reads size of matrix, reports number of inputs and number of outputs on specified switch.
- SS – enables Autostatus feature, which sends messages via RS232 whenever a switch event occurs from any control source (OSD, front panel interface, etc.)

### Ethernet Control
- Female RJ45 connector.
- 10/100 BaseT Ethernet interface.
- Supported protocol: Telnet.
- Control can be done over Telnet.

### Telnet
- Commands are similar to RS232 commands.
- The telnet server listens on port 2005 (configurable).
  - Port 2005 is intended for a software control type session.

### Front Panel Interface
- Locally change ports and navigate through LCD screen to execute actions.
- LCD indicates currently selected port for each user.

### On Screen Display (OSD)
- Select computers by name with the On Screen Display (OSD)
- Use keyboard or mouse to operate the switch from menus superimposed onto the monitor.
- Power status of each computer is displayed.
- View usage statistics – power-on cycles and hours of usage.
- Names can be up to 12 characters long.
- Shows names of computers on cascaded switches up to 256 ports.
- Modify the size and position of the OSD.
- Help screens assist users with the OSD.
- OS- and software-independent.
- OSD is built into the switch – no need to install additional hardware or software.

### Security
- Advanced security included.
- Each user password can be up to 15 characters long, and each switch can store up to 63 users.
- Administrator can enable or disable all security features and select which computers each user can access.
- Once security is enabled, a user or administrator must login in order to access any of the computers connected to the switch.
Up to four users can control 32 USB computers

**Ordering Specifications**

This example explains the NTI part number by breaking it down into the available options. When ordering, choose the options that you require.

**UNIMUX - \( n \times m \) - U HD U**

<table>
<thead>
<tr>
<th>NTI Part #</th>
<th># of Users (n)</th>
<th># of CPUs (m)</th>
<th>Rack Units</th>
<th>Rack Size (Wx Dx H in)</th>
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</thead>
<tbody>
<tr>
<td>UNIMUX-4X8-UHD</td>
<td>4</td>
<td>8</td>
<td>1RU</td>
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<td>16</td>
<td>2RU</td>
<td>19x10x3.5</td>
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<tr>
<td>UNIMUX-4X32-UHD</td>
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<td>32</td>
<td>2RU</td>
<td>19x10x3.5</td>
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</tbody>
</table>

Universal KVM Switch

Optional USB Port

High Density

Optional USB Port